

## CLAIMS

1. System (1) comprising an interleaver (2) for interleaving data units and a de-interleaver (3) for de-interleaving data units, with said interleaver (2) and said de-interleaver (3) each comprising a memory (29,39), characterised in that said memory (29,39) stores data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.  
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2. System (1) according to claim 1, characterised in that said data units are stored at subsequent positions, with at least a part of said data units at at least a part of said subsequent positions being shiftable to further subsequent positions for taking into account said at least one calculated stack position.  
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3. System (1) according to claim 1 or 2, characterised in that said interleaver (2) further comprises a calculator (21) for calculating at least one stack position for at least one data unit to be interleaved and comprises a shifter (23) for in response to said calculating shifting at least a part of said data units in the stack for creating at least one open position for said at least one data unit to be interleaved and comprises an inserter (24) for inserting said at least one data unit to be interleaved into said at least one open position.  
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4. System (1) according to claim 1, 2 or 3, characterised in that said de-interleaver (3) further comprises a calculator (31) for calculating at least one stack position for at least one data unit to be de-interleaved from the stack and comprises an extracter (34) for extracting said at least one data unit to be de-interleaved from said at least one stack position and comprises a shifter (33) for in response to said calculating shifting at least a part of said data units in the stack for closing said at least one stack position.  
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5. Interleaver (2) for interleaving data units and comprising a memory, characterised in that said memory (29) stores data units in the form of at least one  
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stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.

6. De-interleaver (3) for de-interleaving data units and comprising a memory, characterised in that said memory (39) stores data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.

5 7. Method for interleaving data units via an interleaving memory (29) and for de-interleaving data units via a de-interleaving memory (39), characterised in that said method comprises the step of storing in each one of said memories (29,39) data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.

10 15 8. Method for (de)interleaving data units via a (de)interleaving memory (29,39), characterised in that said method comprises the step of storing in said (de)interleaving memory (29,39) data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.

20 25 9. Interleaving processor program product for interleaving data units via an interleaving memory (29), characterised in that said interleaving processor program product comprises the function of storing in said interleaving memory (29) data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.

30 10. De-interleaving processor program product for de-interleaving data units via a de-interleaving memory (39), characterised in that said de-interleaving processor program product comprises the function of storing in said de-interleaving memory (39) data units in the form of at least one stack, with at least a part of a stack being shiftable for taking into account at least one calculated stack position.